HW#11H: Segment Bisectors

Honors Geometry

Due Date: Friday, Sept. 26rd

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_\_\_\_

**Failure to show work on all problems or use complete sentences will result in a LaSalle.**

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| Use the diagram below for problems 1 – 4. | | |
| 1. What is the name of the line that bisects segment *NQ*? | 2. What is the name of the midpoint of *NQ*? | |
| 3. Find *NP* if *NQ* = 31.8 cm. | 4. Find *NQ* if *PQ* = 13 in. | |
| 5. Find *MF.* | 6. Find *MH*. | |
| 7. Line *AB* is bisected at point *C*. Find *AC* if *AB* = 56 feet. | 8. Line *AB* is bisected at point *C*. Find *BC* is if *AC* = 12 cm. | |
| 9. Your house and the mall are 9.6 miles apart on the same straight road. The movie theater is halfway between your house and the mall, on the same road.   1. Draw and label a sketch to represent this situation. 2. How far is your house from the movie theater? | | |
| 10. Which point represents the midpoint of segment AB?     1. Point D B. Point D and Point C 2. Point C D. Point E | | 11. Find the midpoint of a segment on a number line with coordinates -12 and 32.   1. -44 2. 10 3. 20 4. 22 |

Yes, seriously. You have another ***GRASP*** quadratic problem. Quit your wining and get it done.

12) During a “big air” competition, snowboarders launch themselves from a half pipe, perform tricks in the air, and land back in the half pipe. The snowboarder starts her jump at 16.4 feet with an initial velocity of 24 feet per second.

a. Write a vertical motion model to represent the snowboarder’s jump.

b. How long is the snowboarder in the air if she lands 13.2 feet above the base of the half pipe? Round your answer to the nearest hundredth.

c. At what time does the snowboarder hit the ground if she lands at the base of the half pipe?

d. What is the maximum height of the snowboarder?